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I.

OBSERVATIONS ON THE NATURE
AND TREATMENT OF THE
PLAGUE. BY T. MILLINGEN,
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ARMY.

THE symptoms of the plague are so well known to medical men, from the perusal of the descriptions of this distemper published at different epochs by the physicians who have witnessed its ravages, that, unable to add a single feature to their accurate delineations, I should mispend time in undertaking a task already so well executed. The history of the Messenian epidemic, and the treatment found in it most successful, are the only subjects that will, in the following lines, be submitted to the reader's consideration.

An Algerine man-of-war, on board of which the plague had been raging for some time, entered, on the 17th of June, 1825, into the harbor of Modon, and anchored close to the town. Several of the crew came on shore shortly after, and gave the linen of the ship, in order to get washed, to three different Modoniot families. A female belonging to one of these, was, during the night of the 18th, suddenly taken ill, and two days after expired, having on several parts of the body pestilential eruptions. Almost simultaneously, several mem-

bers of the same, as well as of the other two families, were attacked with like symptoms, and shared the same melancholy fate. From this source the contagion irradiated itself in every direction, with a rapidity so alarming, that within the space of three weeks there existed not within the walls of the town a single family that had not contracted the infection, with the exception of those few that had sense enough to lay by their Mahomedan ideas of predestination, and observe within their houses an exact quarantine. The disorder extended, also, its dire influence to the camp. Its effects on the Arabs were, however, comparatively speaking, much less severe than on the indigenous population and negroes. Many of them appeared, as it were, proof against contagion, while few among the Moriots, and none among the men of color, approached it with impunity. Such was the violence of the distemper after the fourth week, that the mortality amounted for some time to forty, and even to fifty a day; a proportion which will appear considerable, when it is remembered that the indigenous population (Greek slaves and prisoners included) then existing at Modon, did not much exceed 7000. The disorder, after some time, insensibly began to abate; towards the beginning of September, the number of recoveries was

already considerable, and the majority of patients attacked in the latter end of the month, after a trifling indisposition, rapidly got well. During the month of October, the complaint insensibly disappeared. Why contagion no longer arose now, either from the bodies of those who had buboes and carbuncles in a state of suppuration, or from the clothes impregnated with the seeds of the complaint, it were vain to attempt explaining, ignorant as we are of the causes which favor its first development, and influence the numerous capricious variations to which it is liable. How shall we account for the fact of the contagion remaining without effect at Nisi of Calamata, as well as at Coron, although communications with the seat of disorder were never interrupted? Several individuals who arrived from Modon died of the plague in the camp, established in the former spot; yet, except in a single instance, the disorder did not propagate itself to any one. The individual alluded to was a young lad in the service of the Hasnader Bey; he died in less than twenty-four hours. Upon inspecting the body, I observed a small bubo in his right groin. I was at one time inclined to think, that the marshy miasmata existing in the atmosphere of Nisi, to such a degree that more than two-thirds of the soldiers were laboring, at that moment, under intermittent fevers of a highly pernicious nature, were, by neutralizing the contagion, the cause of the camp remaining exempt from its baneful effects. Yet so many instances came afterwards to my notice, of contagion being imported to places enjoying the most salubrious air, and there spontaneously disappearing, that I

abandoned that idea as unfounded, and adopted the conclusion—that the plague, though an eminently contagious disorder, is not invariably but conditionally such.

The garrison of Navarino was not so fortunate as those of the above-mentioned places. Some soldiers belonging to it, conveyed from Modon the contagion within that town. The disorder proved here much milder than at Modon, yet it continued to exist after it had totally ceased in the latter place; even in January, ten or twelve persons died of it. At the very moment every one fondly hoped the epidemy was on the eve of vanishing, information came of its having made its terrific appearance at Coron. According to the opinion of most of the inhabitants, an old fur and clothes, purchased by a Coroniot in the bazaar of Modon, were the means of introducing the distemper within their walls. How far this supposition was founded in fact, it is impossible to determine; but certain it is, that the individual in whose possession they were, was the first who died of the plague.—Within a few days, his wife, children, and servant, shared the same fate. The Coroniot epidemy exhibited a character of the greatest malignancy. Many of those attacked died in the space of a few hours, having, in general, no pestilential eruption on the body, but at times having the surface covered with livid vibices and petechiæ. During the epidemy, buboes and carbuncles appeared but rarely.

Modon and the camp enjoyed, as long as the plague was raging at Coron, the most enviable state of health. It was not before the latter end of June that they became again acquainted with this awful disorder. Among the first attacked,

were three friends of mine, Dr. Mino, Dr. Gavotti, and Mr. Trona. The first fell ill a few hours after having felt, without being aware of the nature of his complaint, the pulse of a soldier. The second died twenty-four hours after examining a carbuncle situated on a man's leg, mistaking it for an ill-conditioned sore. Trona caught the complaint in consequence of his generously persisting in attending, to the last moment, his friend Dr. G., though fully aware of the danger to which he thus exposed his own days. As far as the prejudices and ignorance of the Turks would permit it, sanitary measures were immediately taken. The hospital, where upwards of fifteen hundred sick and wounded are lying at this moment—thanks to the strict observance of the instructions given—remained free from the disorder. Two lazarets were established; the one for the reception of those from the camp, and the other for the town's-people. To prevent communication between the contaminated and the exterior, a cordon was placed around each lazaret. But so remiss were the Arab sentinels in the performance of their duty, that but little good could arise from these establishments. Wishing to ascertain how far the orders given were executed, I went one evening to one of the posts, where, finding no one, I advanced close to the lazaret tents, under which I saw the greater portion of the cordon *sanitaire*, some amusing themselves with their convalescent comrades, and others dancing the Arab fandango for their recreation. I plainly saw from that moment that, following the predominant fashion, I was to abandon the events to the *Allah-kerim*. The negligence of the harem gate-

keeper, caused the contagion to introduce itself among Ibrahim's women. In one word, the disorder raged uncontrolled in every quarter. It ceased spontaneously in October, after having destroyed upwards of six thousand inhabitants.

As far as my own experience, and the result of constant inquiries in Peloponnesus, and during a residence of several years in the Levant, allow me to pronounce on the subject, coming into close contact with pestiferated patients, or with objects that have either been touched or worn by them, is the only mode through which the contagion of the plague propagates itself. It differs essentially, in this point, from those epidemic disorders which are taken into the system, by inhaling the effluvia contaminating the atmosphere of a certain town or district, as well as from those, the contagious influence of which is active only for a very short distance around the patient. Although, during several months, in the habit of daily visiting numerous patients laboring under the disorder in question, and not only of breathing the air of unventilated rooms where several were lying, but also of approaching my face close to their persons, in order to judge of the state of the circulation by observing the pulsations of the carotids, and the nature of the respiration, as well as to examine the tongue, &c., yet I escaped the contagion. I attribute this entirely to the precaution I invariably took of never touching a patient, nor any object in their apartments; and every medical man in the army obliged to wait upon the sick, succeeded equally in preserving his health, by observing the same rules. In no one instance did any person become attacked with the com-

plaint, without his being able to acknowledge, as cause of the accident, his having touched the clothes or body of a patient laboring under the disease. So intimately convinced was I at last of the above-stated fact, as to put it to the test of experiment, by practising venesection on a young woman of Ibrahim's harem, a few hours after the appearance of the symptoms of the plague. After causing the ligature to be applied by one of her attendants, I opened the vein, after taking the precaution of anointing my hands with oil, and applying wet leaves of tobacco around the forearm. No conclusion, I am aware, can be drawn from a single fact, it being possible, moreover, that I am one of the happy few endowed with the power of resisting the action of contagion; yet, when this and the above-mentioned facts are taken into consideration, the opinion I have stated will, I trust, be considered as not altogether without some weight. May future experiments demonstrate its truth. Then, instead of imitating the pusillanimous conduct of the generality of medical men during pestilential epidemics, shall future practitioners listen to the cries of suffering humanity, and perform their duties without exposing their own safety.

There existing no specific means of neutralizing the pestilential poison when once introduced by absorption into the economy, moderating in time the violence of its effects is the sole object the physician can undertake to accomplish. Amidst the formidable symptoms its energy gives rise to, the most predominant are those denoting the sufferings of the brain and appendages, as well as of the stomach. Analogy points out that they are,

in almost every respect, similar to those arising from inflammation of these organs carried to the highest pitch; so that the disorder may be termed an encephalo-gastritis, connected in general with an affection of the lymphatic system. Pathological researches amply confirm this idea. To the inflammatory stage, the duration of which seldom exceeds twenty-four hours, succeeds one composed of symptoms that are but the expression of the degree of injury inflammation has operated on these important organs. Should it have been slight, recovery follows; otherwise, the fatal termination is inevitable. This we observed in the numerous patients who refused medical aid, and entirely abandoned themselves to nature's care. It arises from these considerations, that the speedy and energetical employment of means capable of subduing the inflammatory symptoms offers the only chance of saving the patient, by putting a stop to the work of disorganization. The second stage once fairly established, the patient's fate is already irrevocably pronounced favorably or unfavorably. In the former case, the interference of art is almost superfluous; in the latter, of no avail.

Convinced how very limited the time is during which the antiphlogistic means can be of service, I invariably declined undertaking the treatment of those who applied for my assistance after the lapse of twenty-four hours; and to this circumstance I in a great measure attribute the success of my practice. The following is a brief outline of the treatment I employed:—The congestive stage being generally gone by when I saw the patient, I ordered venesection *ad deliquium*, and half an hour after the operation,

the application of forty leeches to the temples, and of an equal number to the epigastric region. The alleviation of the cephalic and gastric symptoms, which invariably followed, continued in general but a few hours. On the exacerbation supervening, phlebotomy was practised without delay, and, if necessary, repeated for the third time on the same day. On the following, leeches were applied again in the neighborhood of the above-mentioned organs, in numbers proportioned to the urgency of the symptoms, and the same means again and again resorted to, until every spark of inflammation became extinct. About this time, blisters to the nape of the neck, and over the epigastric region, were found peculiarly advantageous. As long as pain continued to exist in the head, cold applications were constantly employed. Sponging the surface of the body with water and vinegar afforded much relief to the patient's feelings.

During the first days of the complaint, the only medicine I exhibited was the aqua Lauri cerasi. Given in doses of ten drops every hour, it is perhaps one of the best sedatives we possess in febrile disorders attended with much nervous irritation. Refrigerant drinks were liberally allowed to every patient.

The results of this simple treatment were in general most gratifying. The disorder appeared to be disarmed by it of its malignancy, and to have been metamorphosed into a malady of common occurrence. Successful as my practice was, it would, I doubt not, have been yet more so, had not my endeavors been counteracted by the ignorance and sloth of the patients' attendants, and at first by the deep-rooted prejudice they entertained

against bloodletting. This arose in consequence of their having seen it employed in numerous cases which nevertheless proved fatal. It is strange that many physicians should have adopted the same conclusion, without reflecting that in every complaint in which phlebotomy is the only means of salvation, its success depends entirely upon its being sufficiently early and energetically resorted to. Shall we say that phlebotomy is fatal in phrenitis, peritonitis, and other disorders of this class, because hundreds die of these complaints in consequence of timid or negligent practitioners having performed the operation too late and too sparingly? How often also is every advantage obtained by venesection destroyed by the empirical administration of remedies, whose action is diametrically opposite to the end proposed? How many practitioners light with one hand the fire they seek to extinguish with the other! Emetics and purgatives were, on this account, never administered to my patients, persuaded their irritation could not but awaken anew the gastric symptoms, which the employment of the antiphlogistic means had just allayed. I had repeated occasions to witness the evils they gave rise to. Indeed, it were difficult for a physiological physician to imagine what good results those who give them can suppose will arise from their effects, more especially as we see that vomiting, which generally exists at the beginning of the complaint, far from relieving the patient, proves one of the most harassing and obstinate symptoms, and that diarrhoea is an invariably fatal sign. When inflammation has been entirely subdued, sufficient alvine evacuations may be procured by

oily emulsions and emollient clysters.

What has been said relating to purgatives, is yet more applicable to the administration of tonics and narcotics. Ether, camphor, opium, valerian, bark, musk, &c., were, during the epidemy, freely ordered by some of the Italians in the service. It is almost superfluous to say they were in every instance highly injurious. Diaphoretics have been recommended by many systematic writers, and more especially by Sydenham. In the more dangerous forms of the plague, their administration during the inflammatory period will remain without effect; and when this has been properly combated, a spontaneous perspiration generally appears, which relieves the patient much more than if it had been forced by art. No practitioner, aware how precious the first hours of this complaint are, will trifle them away in watching the operation of a remedy which, were it even to have its full effect, could produce but an alleviation, slight, indeed, when compared to that which proper antiphlogistic measures will assuredly obtain in the generality of cases.

Linseed poultices, rendered stimulant by the addition of mustard, were the applications I usually made to buboes. Their suppuration is as desirable as their retrocession is, generally speaking, inauspicious. Among the various applications made to carbuncles, the fermenting poultice is, perhaps, the most advantageous.

Such are the outlines of the treatment which, in this terrible disorder, appears to offer the only chance of saving the patient. I found it to fail only in those cases in which the brain had received a deep and violent irritation, which

at once, as it were, paralysed its powers of reaction, and threw it into a condition which baffled alike all the assistance of medical art.—*Lond. Med. Gaz.*

II.

SYMPTOMS OF INFLAMMATION OF THE BLADDER, ARISING FROM DENTITION.

THE following interesting case, published in the Gazette of Practical Medicine, will illustrate the benefit of the practice of cutting the gums of teething children;—a practice which is universal, we believe, in this city, but not so in other places. The author of the paper is Dr. Gaitskell, of Rotherhithe.

The subject of this distressing disease was a little boy, about two years of age, who wanted five teeth to complete his set, three grinders (molares), and two canine (cuspidati). The first symptom of which the child complained, was pain in the bladder on making water, accompanied with considerable tenesmus and a smart fever, which very much disturbed him, particularly during the night. The medical gentleman who first attended him attributing his sufferings to a stone in the bladder, recommended palliative remedies, till the real cause could be clearly ascertained. The gentleman, on passing a sound into the bladder, thought he discovered a stone; but the examination not being perfectly satisfactory to him, he requested me to examine the bladder, which I did with a small catheter; and after drawing off about two tablespoonfuls of urine, mixed with mucus, I was not able to discover the presence of a calculus: we therefore agreed to call

in Mr. Callaway, who, after a careful examination, declared he could not find a stone, and of course all idea of an operation was abandoned. The medical treatment proposed, was an anodyne clyster at bed-time, a draught of the liquor of potass with mucilage three times a day, and the warm bath occasionally, with mucilaginous drinks, and a milk diet; also a dose of castor oil occasionally, to open the bowels. This plan was pursued for a fortnight, with only a slight alleviation of the child's suffering. The parents becoming tired of teasing the child with medicines, resolved on discontinuing them and going into the country; but it was thought right to continue the warm bath and the anodyne injection, which procured the child rest at night. The inflammation at times ran so high that the urine exhibited a purulent appearance, and had a strong ammoniacal smell. In consequence of reading Hunter on the teeth, who relates some remarkable sympathies from dentition, which I have often seen verified, I asked permission to lance the gums; to which, after some hesitation, the parents consented. I divided them freely by crucial incisions, which bled copiously, the gums being highly inflamed. This gave instant relief, the complaint speedily ceased, and in a few days he made more water, quite healthy and without pain. Thus were terminated these tragic symptoms by a simple operation, performed on a part remote from the seat of the malady, and which was evidently sympathetic.

I have for many years been convinced of the necessity of lancing the gums of children in a variety of diseases occurring during tedious or difficult dentition, and have prac-

tised it ever since I left Edinburgh, in 1784. I have often been much surprised at the reluctance of many practitioners of the present day to do it. I have seen many children die evidently from the neglect of it, and some from the operation (though simple and safe) having been improperly performed. I hope as general practitioners become more enlightened, they will endeavor to prevail on mothers to give up their prejudices, and allow the medical attendant to do his duty. Dr. Munro (secundus) and the late Dr. Hamilton (the obstetrician), both recommend it strongly to their pupils; but what is more convincing, are the numerous strong facts in favor of the operation by that great man, John Hunter. There is not a fact in his admirable Treatise on Teething that I have not seen fully confirmed in my own practice. I remember a wine-merchant in Tower Street, who had lost four children in convulsive fits, in consequence of the reluctance of his medical man to lance the gums, not thinking the operation necessary. The other children, five in number, were brought to me, and by freely lancing their gums I saved their lives. When the gums are lanced, it should be done freely, and, if the grinders are advancing, by crucial incisions. The local bleeding, no doubt, proves very beneficial, as well as the division of the irritated membrane. There is not a writer, of any celebrity, on the diseases of children, who does not recommend the gums to be lanced. I shall conclude this communication with a few extracts from the celebrated Hunter on this interesting subject.

Of Cutting the Gums.—"As far as my experience has taught me, to cut the gums down to the

teeth appears to be the only cure. It acts by taking off the tension upon the gums arising from the growth of the tooth, or by preventing ulceration. It often happens, particularly when the operation is performed early in the disease, that the gums will reunite over the teeth, in which case the cause will be reproduced, and must be removed by the same method. I have performed the operation ten times upon the same tooth, and every time with the absolute removal of the symptoms. The operation should not be done with a fine-pointed instrument, because most probably the point will be broken off against the tooth, which will make the instrument unfit for going on further, if more incisions are required. A common lancet, with its point rounded, is a very good instrument; something like a fleam would be a most convenient shape."

[The author then relates the following histories.]

Case 1.—A young child was attacked with contractions of the muscoli flexores of the fingers and also of the toes. These contractions were so considerable as to keep the fingers and thumb constantly clenched, and so irregular as to appear distorted; all the antispasmodic medicines were given for several months, but without success. I scarified the gums down to the teeth, and in less than half an hour all the contractions ceased. This, however, only gave relief for a time. The gums healed, the teeth continued to grow, and filled up the new place acquired by the scarification. The same symptoms appearing a second time, the former operation was repeated successfully.

Case 2.—A boy, about two years of age, was seized with pain on

making water, and voided matter from the urethra. I suspected this child might probably be affected by the venereal disease, and suspicions naturally fell on the nurse. These complaints advanced and abated according to the degree of inflammation of the gums; and on the gums and system becoming quiet, they entirely ceased.

III.

OBSERVATIONS ON A FEVER PREVALENT IN THE SPRING OF THE PRESENT YEAR. BY DR. ROUPPELL.

REFERENCE was made last week to the fever which had recently prevailed in some parts of London. The most clear description of this disease, which differs as much as does the plague from cholera, is contained in a paper read before the London College of Physicians by Dr. Roupell, for an account of which we are indebted to the Medical Gazette.

The author being physician to the Floating Hospital, moored off Greenwich, has had ample opportunities of observing this complaint, and the seamen whom he has had to treat seem to have been particularly obnoxious to it, predisposed, by their thoughtless improvident character leaving them subject to many privations, and by the unwholesome state of the neighborhood of Greenwich—notwithstanding the Institutions established in various parts of that eastern suburb of our city. There is in general a pretty good supply of fever (of no very peculiar character, however), in the quarter in question; but during the present spring the number of cases, as well as the special features of the disease,

claimed particular notice. A principal symptom in those attacked, was sudden prostration of strength, so decided and severe that even the stoutest, in twenty-four hours, would be unable to stand without support, or turn unaided in his bed. The countenance was generally dusky, in those presenting themselves for admission, but sometimes flushed and sometimes pale. More marked peculiarities were presently observed: a brilliancy of the eye, in which there was often a strange wildness, a fixedness and intensity of gaze, strongly contrasted with the other signs of debility. The intellectual functions were affected. On questioning the patients about their sensations, some denied that they were at all ill, while others were immoderately depressed, bursting into tears, and declaring their conviction that they should surely die. Some, when questioned, maintained for a time an obstinate silence, and then gave an incoherent answer in a loud voice and a maniacal manner. Their disordered feelings were variously described: torrents in the ears; flashes of light before the eyes; fire on the brain; thoughts rushing; images passing in rapid succession. The most intimate acquaintances were not recognised; memory in some (though without loss of consciousness) so completely gone, that no history of the complaint could be obtained; many doubted their identity, and one *thought he had died*. The pupil was dilated; the conjunctiva, in most cases, of a rose-red hue; the tongue broadly and thickly coated with a dirty-brown fur; the thirst was intense; the stomach bore food, though no appetite was felt; vomiting was rare; hiccough frequent. The bowels were usually constipated, but when open the evacua-

tions passed involuntarily; and the urine frequently was detained in the bladder from paralysis of its muscles. The pulse very weak and infrequent—often intermitting. While the pulse was being felt, the flexor muscles of the hand were noticed to twitch considerably. The muscles of the mouth, too, especially after speaking, exhibited the same appearance of twitching. The heat of skin generally was not above the common standard; that of the forehead, however, was increased. A rash was perceptible in general over the lower extremities, resembling strongly the eruption in measles, but not presenting the crescent-like aspect, and occurring in elderly persons, and those who had already had rubeola. Some had true petechiæ. The pains which seemed to be most distressing, were those of the limbs and the back of the neck; headach not so severe.

The general progress of the complaint was this:—Languor; pain in the head and limbs; horripilation, with chilliness; depressed pulse; despondency; watching, with confusion of ideas lasting many days. The next stage was marked by more active cerebral disturbance, by inflammation of the lungs, and the appearance of rash, or petechiæ; with little reaction of the heart and arteries. The third stage, by partial paralysis; coma; subsultus; dry tongue; thick sordes on the teeth; copious discharges of blood from the bowels; fixedness of jaw; cold extremities; death.

Of the successful cases, the majority terminated between the eighteenth and twenty-fourth days of the disease, which seemed to be the critical periods, as death, in the unsuccessful cases, generally occurred on the same days, though

the seventh and fourteenth were fatal in one or two instances. Perspiration, when it did occur in the course of the complaint, seemed to give no relief.

Convalescence was slow ; giddiness, deafness, and debility, remaining after the other symptoms had declined. The parotid glands, too (or the neighboring tissues), in five patients, swelled and discharged pus ; the inguinal glands in one, and the axillary in another. One man lost part of the greater number of his toes ; how much of the foot will remain to another, is yet to be decided ; in both, heat and redness, with acute pain, speedily gave way to mortification.

The strong tendency to hemorrhage during the complaint was remarkable : it occurred spontaneously from the nose and bowels, in some cases, and the leeches were observed to bleed copiously.

With respect to treatment: those were bled from the arm, or cupped, or leeches, in whom the cerebral symptoms were most urgent, who had most strength, and in whom the conjunctiva was diffused. Those with sore throat, weak pulse, and slight head affection, took subcarb. ammon. in camphor mixture or bitter infusion, or in the form of effervescing saline draught. Sulphuric ether, with dilute spirit of Mindererus, was given to those who, with weak pulse and cold skin, had an excited nervous system ; blisters, at the same time, were applied between the shoulders and nape of the neck, and opiates were exhibited at night. Cooling acid drinks were allowed.

Bleeding with leeches was found to be the most beneficial mode of depletion ; general bleeding was in general ill borne.

The benefit of mercury was very

doubtful, as the mouth, in some, became sore without any abatement of the symptoms, whilst many and severe cases did well under its free and continued use. Emetics, in the very early stage of the complaint, had a marked good effect, but at later periods were perfectly useless. In the way of purgatives, the powder recommended by Rush—ten grains of calomel and fifteen of jalap—was most suited to Dr. Roupell's patients.

The total number of fever cases admitted from the 1st of January to the 18th of April, was 119. Of these, the number in whom the disease assumed the peculiar type just described, was 75; of whom twelve died ; but Dr. Roupell calculates, upon a nicer scrutiny, that the mortality was but 5 out of 68.

The appearances on dissection confirmed the opinions which could not but be formed with regard to the inflammation of the membranes of the brain : turgescence of vessels ; great vascularity ; effusion of serum ; and deposition of solid lymph, varying from a quantity only sufficient to render the arachnoid opaque, to the thickness of a line. The effusion of lymph was, in all cases but one, between the arachnoid and pia mater, to which, in the excepted case, it was external.

It would be difficult to procure more positive contradiction to the theory of Broussais than these cases afforded. The mucous membranes of the bowels not only bore no marks whatever of inflammation, but there were no enlarged glands—no discoloration—no softening—no thickness—nor ulceration of any sort. On the other hand, to those who stop short and see only one disease, local inflammation, and calling fever "meningitis," insist upon the only cure being free de-

pletion—to those Dr. R. replies, that he was himself at first misled by the theory, but upon practising in accordance with it, and opening the temporal artery in a case or two which seemed to require such a step, temporary benefit was certainly derived, but sudden phrenzy, and rapid sinking, in these instances, soon satisfied him that he had more to treat than simple inflammation.

The blood was of a loose texture—often did not cup or buff. The pulse never rose during or after bleeding.

Peculiarities such as those described—particularly taking into account the rash, and the history of the complaint—clearly convince Dr. Roupell of its specific nature, and that it is well worthy of more ample discussion.

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FORMER PREVALENCE OF CHOLERA.

It is somewhat remarkable that the same disease which now commits such dreadful ravages in the armies of the north, should be but a second visitation of a malady which devastated the ranks of the army in Hungary during the 17th century. In Solvandez's History of Poland, may be found a letter from John Sobieski, King of Poland, to his wife. This letter was written shortly after the battle of Vienna, is dated Sept. 28, 1683, and contains the following sentences:—

“ ——— The half of our army is sick, and of a complaint as contagious as the plague itself: they call it the Hungarian fever. It is at-

tended with looseness and discharge of blood; after which come vomiting, fainting, and delirium. Almost all our nobles and officers are quartered at Presbourg: many of them are already dead: and what seems extraordinary, the disease has reappeared in some who had previously passed through it. God in his goodness will perhaps assuage our miseries: if they continue, there will need no other enemy to destroy us.”

And again:—“ It is so strange a scourge, that just after seeing a man going about, and full of activity, you hear that he is already insensible and beyond hope. We have remarked that intoxication was a means of safety.”

The above is sufficiently descriptive of the disease to establish its probable analogy to that which is now prevailing in Europe, and which excites scarcely less attention or alarm in England, and Russia, and Poland, than the political troubles in which the inhabitants of those countries are so deeply involved. Both the symptoms and rapidly fatal effects of the disease are the same now as then. According to the report of Professor Lichtenstein, of St. Petersburg (some account of which we have already given), it frequently terminates life in three hours, and the proportion of deaths is about one in three. During summer, the mortality has been much greater than in the colder months.

Respecting means of prevention, we have remarked that an English writer, who appears to have given much attention to the subject, states that brandy and laudanum have been

found the most effectual. This fact is noticed here more particularly from its coincidence with that referred to in the closing sentence of our extract from the letter of Sobieski. In both cases, it is evident there must be some error. The experience of all ages has shown that the only way to avoid such diseases, is to preserve the resisting powers of the system in their greatest possible vigor:—by good diet, regular exercise, temperance in all things, a cheerful temper, and undaunted spirit; to preserve the physical strength unimpaired. On the other hand, there is no sorer way of surrendering the body a victim to a contagious disease, than to be calculating the chances and searching after the reputed means of escaping it, to brood upon its terrors, or watch its approach with anxious and incessant solicitude. To attempt to drown these fears by stimulants or narcotics of any kind, to weaken the system by starvation, or derange it by repletion, are equally subversive of the hopes they are designed to brighten.

With respect to the necessity of quarantine regulations, and the possibility of excluding the disease by such measures, we have much yet to learn before forming a settled opinion. So far as facts have been developed, it appears that the disease is not communicated by goods, but that the persons of the sick alone can convey it from place to place. It also appears that the disease has never broken out in an individual at a more protracted period than twenty days after exposure to the conta-

gion. If, then, a vessel coming to us from a port in which this disease exists, has been out *more than three weeks*, there seems little necessity for a quarantine; but any vessel from such a port in *less than three weeks*, ought, it would appear, to be kept off, till it might be ascertained that no person on board had imbibed the seeds of the disease.

These conclusions will follow, if the two premises from which they are drawn prove to be correct. They are derived at present from the best authorities we have on this subject; but it is by no means certain that future events may not show that they are but a broken reed. We would therefore have it understood that we put forth these sentiments not as opinions well established, and on which police regulations may be safely grounded, but as the *probable* state of the case, the truth of which must be tested by facts yet to be made known.

APPLICATION OF ANATOMY TO MEDICINE.

It is said that when Sir Hans Sloane, on his arrival in London, called on Sydenham, to whom he was highly recommended for his knowledge of botany, and his skill in anatomy—"Nonsense, Sir," said the Doctor, after reading the letter, "I know an old woman in Covent Garden that understands botany better; and as for anatomy, my butcher can dissect a joint full as well. You must go to the bedside, young man; it is there only you can study disease." Such a sweeping denunciation, if made at the present day, would, we appre-

hend, somewhat endanger the author's reputation, were it even as great as that which Sydenham enjoyed. The relation of anatomy to medicine is regarded in a very different light now from what it was two centuries since ; and the former, from being almost nothing, has come to be viewed as nearly everything, in forming the diagnosis of disease. According to what has been considered a prevalent theory of the day, every disease must be referred to a place, must have assigned to it a local habitation, must be regarded as consisting in the alteration of some tissue, and as capable, by its nature, of being appreciated by an examination of the diseased structure. In connection with this view of the subject, examinations of morbid parts now assume an importance unknown to them in the days of our predecessors and instructors. Bodies must be examined, not to ascertain the effects of the disease, not to decide on the changes of structure to which it led, or by which it was accompanied, but to determine the disease itself. If the state of the parts, as found, correspond to the previous diagnosis, the disease was correctly discerned ; if not, the practitioner has been wholly deceived, and has, in fact, treated one malady by prescribing for another. If no structural alteration can be detected, the disease remains a mystery, and should the same symptoms again present themselves, they are not to be regarded as constituting any proper malady, or susceptible of any other than purely empirical treatment.

In the organic doctrine of disease,

as it has been sometimes termed, the external phenomena are no farther regarded than as they serve to indicate the internal alteration. The symptoms are not considered as constituting the disease, either in whole or in part, nor are these symptoms the objects of the treatment. They serve, indeed, to point to the particular part affected, because each tissue enters into the composition of organs, and these have functions the derangement of which may be recognised by the senses ; the seat of pain can also be described with more or less accuracy, and aid is thus afforded in detecting the nature of the case. But neither the derangement of function, nor the accompanying pain, nor the change in the excretions, nor alterations of obnoxious parts in color or texture, nor all these circumstances combined, constitute the disease ; this still consists in an alteration of some internal structure ; and it is to the discovery of this that the attention of the practitioner must be directed.

As the proportion of diseases which are followed by a fatal termination is of course small, so that the state of parts which accompanies or follows certain symptoms cannot, in any considerable portion, be actually discovered by inspection ; and as, in the second place, the various changes thus discovered do not readily admit of exact description, it is necessary, even in adopting the principles of the above doctrine, to resort to some expedient for expressing briefly and simply the particular part affected, and the general character of the affection, independently of the

peculiar phenomena which it may be conjectured to present. Now, since most morbid affections of parts commence with increased action of the circulating vessels of those parts, or at least with an increased determination of the circulating fluid toward them, it has been convenient to those who maintain this doctrine, to consider most affections accompanied with pain, impaired or altered function, &c., as inflammatory affections of some tissue or organ. In this view of the subject, diseases which before were variously designated, are by these pathologists termed inflammations, sub-inflammations, or irritations, of the parts principally affected.

It would be doing manifest injustice to the organic doctrine, to suppose the above a full account of the peculiar views it maintains, or of the observations on which it is founded. What we have said, however, will serve as an introduction to a few observations on some points which have attracted much attention, and which are now the subject of one of the most active controversies in which the science of medicine has ever engaged its cultivators. Viewing this controversy from a distance as we do, it is easy to discover that undue excitement has been manifested on both sides, and that disputes about words have taken the place of the discussion of important principles. But that, on some points of real importance, there is an honest difference of opinions between the parties, and that, under other names and in a different guise, the same questions have divided the members

of the profession before the discussion assumed its present distinct form, no one who reads the medical literature of the day can entertain a doubt.

What is it which essentially constitutes disease? We will suppose this question sufficiently answered by saying, the sensation of pain; and it will be necessary, in the next place, to settle the question whether pain can exist independently of any organic lesion. Now, in the determination of this point, we derive no aid from the researches of morbid anatomy. In a large proportion of cases in which pain is referred to the external surface as its seat, the most careful examination does not enable us to detect any change of structure in the part; and in equally slight internal affections, could the part be submitted to our inspection, we should probably be equally unsuccessful. This point, therefore, fairly belongs to the field of conjecture. It seems probable enough that pain in a part may be preceded generally by a slight increase of the local circulation, or, at least, increased fulness of the vessels. Such is probably the case in the ordinary forms of headach; and in the great proportion of pains which are usually regarded as purely nervous, there is, very possibly, antecedent or consequent, some influence produced on the circulation itself. This position is evidently broad enough to cover the whole ground, and in this sense it may be conceded that every disease implies, and is accompanied with, some change in structure. What is the nature of the change in

a given case, in which certain symptoms are presented, is a very different question. To its elucidation, morbid anatomy has certainly contributed very much, and is daily adding new information. But from its very nature, morbid anatomy is, in many respects, an imperfect guide. It informs us as to the state of the parts at the moment of observation, but does not teach us the series of progressive changes by which they arrived at that state. Perhaps we learn from a post-mortem examination the cause of death, but are left in ignorance of the cause of the preceding disease. Perhaps the organ in which we expected to discover the morbid change, appears perfectly healthy, and we are left in doubt whether the alteration has disappeared, or is so minute as to elude our observation, or whether the symptoms which we referred to the organ in question, arose from the affection of a different one, while this was influenced only by sympathy. Again, it is not always easy to determine whether the state of a dead part is morbid or otherwise. It is only of late that it has been fairly settled what is the appearance of the gastric mucous membrane when in perfect health, and there are probably many who still feel a doubt on this important point. The natural appearance of the peritoneal coat of the intestines, is another difficult point to settle; and this membrane frequently presents a suspicious aspect when there had been nothing to direct attention to it during life. Organs supposed to be extensively inflamed, have been found in a state of entire soundness; and others are discover-

ed to have passed through inflammatory processes, of which, during life, they manifested no sign. There is no organ certainly which gives more uniform indications after death of disease observed during life, than the lungs; but even here, when a diagnosis has been at all minute, how frequently does it prove erroneous! The precise part of the organ affected, the degree of disorganization, the existence of large cavities, the obliteration of air-cells, are all points about which mistakes are continually committed, notwithstanding the multiplied advantages we enjoy for making accurate investigations of this part. The heart, too, frequently deceives us, presenting during life the greatest possible functional derangement, and after death appearing, as respects its organic structure, most perfectly healthy. It is needless to multiply examples. There is probably no organ or tissue in the human body which has not sometimes given evidence of being affected with organic disease or extensive inflammation, from which, on examination, it has been found wholly exempt. But the ambiguity of post-mortem examinations is not the sole difficulty in assigning a local seat to a certain combination of symptoms. Unless the same symptoms have been previously observed, and the cause ascertained by subsequent examination, they will convey no precise information on which to found a diagnosis of the disease, or a plan for its treatment. It almost never happens, except during the prevalence of an epidemic, that two cases are met with by the same practitioner presenting the same

combination of symptoms; and it is far more rare that in two pathologic examinations, appearances are found distinctly morbid, and which we can pronounce to be precisely similar. The difficulty of availing ourselves, in this respect, of the experience of others, is universally acknowledged. In regard to morbid anatomy, it has, till of late years, been wholly insuperable; and though pathologists of all countries are now laboring, by graphic delineations, to improve this branch of science, it may be doubted whether it will ever be easy to found satisfactory conclusions on this sort of comparison. On the other hand, it is but too well proved, even by the imperfect evidence we possess, that cases of the same apparent character present widely different pathologic appearances, while similar structural lesions have been discovered, consequent on diseases which have nothing else in common.

Such are only a few of the obstacles which cross the path of him who would assign a local, tangible character, to every disease which comes under his observation. In the midst of all this embarrassment, who will say that the practitioner shall defer giving a name to a disease, or deciding on its treatment, till its proximate cause and seat shall be fully determined. Certainly no wise man will advise, no practical man will pursue, such a course as this. The path dictated by reason differs as widely from this, as it does from the

wildness of entire empiricism. He who acts without observation is unworthy the name of physician; he who observes and acts not, because his investigations do not lead him to entire certainty, loses the substance while pursuing the shadow. Nothing is more certain than that each symptom has its proximate cause; nothing is more uncertain, in many cases, than what this cause may be. But the practical result is often independent of both these points, and the treatment will frequently be successful which has for its object the removal of the obvious symptoms. He seems to be the true practitioner, who, while he neglects no means of investigating the essential nature of a disease, does not permit the uncertainty attending this inquiry to impair, in any degree, the promptness and efficiency of his treatment; who, while he studies the disease as a philosopher and a pathologist, adopts, in his treatment, the dictates of experience, and the suggestions of enlightened and practical common sense.

Agreeably to the notice recently given, the present No. of the Journal will complete the fourth volume. The title page and index will be forwarded to subscribers next week.

Whole number of deaths in Boston the week ending July 29th, 26. Males, 11—Females, 14. Stillborn, 1.

Of consumption, 2—mortification in bowels, 1—inflammation in bowels, 1—old age, 1—scarlet fever, 1—poison, 1—disease of heart, 1—typhous fever, 1—inflammation on lungs, 1—throat distemper, 1—apoplexy, 1—cancer, 1—unknown, 4—bleeding at lungs, 1, &c.

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